

Smart Meter Facts

1. How do the smart meters work? What's different about these meters compared to the old meters?

One of the easiest ways to understand how a smart meter works is to compare it to the traditional meter used at many homes and businesses today. Electromechanical meters have mechanical parts that spin as electricity is consumed.



They display usage with small dials. If you have a digital meter, the usage readout will flash on an electronic display screen. These displays are read once a month to determine your bill.

Advanced digital or “smart” meters—like the older digital meters—track your consumption with no moving parts. They use secure radio frequencies to communicate directly with Leesburg’s electric utility through intelligent devices installed on the electrical grid.

With the smart meter, readings will be collected remotely—sometimes from miles away. The energy usage information also will be available to customers online so they can more closely monitor and manage their energy use.

Monthly, daily and hourly usage will be available to customers, providing a more complete picture of electric consumption. Currently customers can view their monthly usage only when the electric bill arrives in the mail 10 days or more after the reading originally was obtained.

2. How do the smart meters transmit information to the utility?

The meters communicate through radio frequency a few minutes or less every day. Each meter is equipped with a full two-way radio transmitter that sends and receives information to an access point that is also radio-equipped.

The access point collects readings from thousands of meters in the area and transmits the data back to Leesburg’s electric utility. The access points are shoe-box sized devices typically mounted high up on lamp posts or power poles.

New RF mesh technology expands the ability of a meter to communicate to an access point by allowing the signal to be relayed by other meters in the network to find a path and maintain the connection required for communications.

3. Are the new advanced electronic meters accurate?

Yes. All of Leesburg’s meters must meet rigorous standards of accuracy and are thoroughly tested as part of our normal operating procedures.

4. How does Leesburg ensure that these meters are accurate?

Leesburg has industry-leading best practices to ensure the accuracy of its meters. Every new smart meter will be tested multiple times for accuracy. Here’s how the testing works:

- Before the meters are shipped to Leesburg, the manufacturer, GE Energy, performs accuracy testing on each device to ensure that they meet strict requirements for accuracy within +/- 0.5 percent. This tolerance exceeds the requirements of the Florida Administrative Code and conforms to the American National Standards Institute — the agency that provides guidelines that specify meter accuracy. The test results for each meter are maintained by the City of Leesburg.
- In addition, GE also performs “end of line” sample testing, during which a sampling of meters from each production run is tested for full functionality. Leesburg’s Meter Lab receives a Quality Certificate for

each shipment attesting to a successful completion of the end-of-line sample test.

- Once meters reach Leesburg, our meter technician will pull pallets of meters at random from periodic shipments for additional accuracy testing.

5. Are the new meters more accurate than the old meters?

The new smart meters are just as accurate as our current meters.

In some cases, the new meters will replace older electromechanical meters that display power usage with a series of analog dials. Electronic meters use no moving parts and report power usage through digital displays.

6. Will Leesburg still need meter readers?

Initially, smart meters will record only electric use. The city will continue to provide meter readers to manually check natural gas and water meters each month.

7. Will Leesburg replace all of its meters with this new technology?

Leesburg is planning a full-scale installation to provide 24,000 residential and business electric service customers with smart meters. Smart meter deployment is scheduled during late spring and early summer of 2012. Natural gas and water meters may be replaced in coming years.

8. What can I expect when a new smart meter is installed?

An installer, working on behalf of Leesburg, will knock on your door to let you know we are working on your meter.

The work doesn’t take long—usually less than 10 minutes. During that time, you will experience a very brief interruption of your electric service.

We will do everything we can to keep the inconvenience to a minimum. If we cannot access the meter, we will leave a door hanger asking that you contact us to set an appointment.

9. Do I have to be at home when the smart meter is installed?

If we are able to access the meter, you do not have to be at home. If we cannot easily access your meter, we will need to make arrangements to gain access to change the meter.

10. How will I know when I have a smart meter and can access the information it provides?

We will send you more details about smart grid benefits when the transition to smart meters has been completed in your area.

This can take several months after the meter has been installed. That’s because there are a lot of associated communications and networking components that must be put into place to enable communication.

Once all of these elements are installed, Leesburg will perform extensive tests to verify that the performance of the system meets our strict criteria. In the interim, Leesburg will continue to read the meter manually. When the smart meter is activated, Leesburg will begin billing based on the remote readings from the new meter. You will then be able to access your detailed usage information online.

11. Are there any eligibility requirements to receive a smart meter?

Leesburg will provide a smart meter to all residential and business customers throughout Leesburg’s electric service territory.

12. Will installing a smart meter raise the amount of my energy bill?

The smart meter will not increase the amount of electricity you use. It is the amount of electricity you use that determines the amount of your monthly bill. It is important to note that electricity usage does vary significantly throughout the year, with weather as the largest contributing factor.

If you would like to reduce your energy costs, Leesburg has a variety of tips and programs that can help you to conserve energy whenever possible.

13. Will the smart meter decrease my energy bill?

The smart meter gives you more information about your energy usage and allows you to make better informed choices to conserve energy and save money. Just as it is today, ultimately it's the choices you make that determine how much electricity you use, and consequently, how much you're billed.

14. Do I have to pay for the cost of electricity needed by the meter to transmit usage information to Leesburg?

No. There are essentially two 'sides' of the meter – the source side, which is the utility side, and the demand side, which is the home and business side that is used to calculate your bill. The power used to drive the meter and communicate with Leesburg is obtained from the source side of the meter and thus is not registered on the display, nor charged to the customer.

15. If this technology is using a radio frequency to report information, will it be secure?

Yes. Leesburg considers the safe delivery of electrical service our paramount priority. This includes the protection of our networks and customer data.

Leesburg's standards are much more strict than the current industry standards, and we are taking a very conservative approach to our rollout of smart meters. We conduct small-scale pilot projects, and we bring in third-party experts to review and test our systems.

We use multiple third-parties in order to get the benefit of the best experts in the industry. We also work very closely with our strategic partners, including GE Energy and others, to apply best practices developed from securing other critical infrastructures. In addition, Leesburg is working with the Federal Energy Regulatory Commission and the U.S. Department of Energy to ensure that proper security measures are part of any deployment of smart meters.

16. Do you have more information about radio frequency and the smart meters?

New smart meters record your electricity use digitally and use small, low-power radios to send the information securely to Leesburg. This

makes it possible for us to deliver a variety of benefits to customers, including greater reliability and more information that enables you to have more control over your energy bills.

Radio frequency (RF) is a term used to describe both man-made and naturally-occurring energy associated with electromagnetic waveforms in the range of about 30 kHz to 300 GHz. Ambient RF comes from many sources used every day. Some common sources of RF include cellular phone transmissions, TV over-the-air broadcast, wireless computer networks, AM/FM radio stations, HAM radios, satellite transmissions, among others.

17. What if I am currently enrolled in the surge protection program with Leesburg?

The installation of the smart meters will not have any impact on this program or equipment.

18. Will I be billed differently once I am using the new technology?

No. You will continue to receive your bill in the same manner as you do today.

19. Will my billing date change as a result of the advanced electronic metering project?

No. Your billing date will not change at this time as a result of your new meter.

20. How can customers who don't have Internet access monitor their smart meters and their energy usage?

Customers without Internet access at home can sign in securely to Leesburg's website from their local public library or other locations that offer free Internet access. Also, customers can call 352-728-9800 to speak to a customer service representative who will be able to review usage over the phone or answer specific questions.

21. Will there be a charge for the new meter?

No. You will not be assessed any additional charges for this new meter.

22. If you are going to access my yard or property, do I need to secure my dog? If so, when?

It depends. If installers need access to your back yard, they will knock at your door first to let you know at which time you can secure your dog.

If you are not at home when the installer needs access to your yard, and they are not able to obtain safe access because of a dog or locked fence, a notice will be left at your door letting you know they were there and a phone number will be provided to schedule an appointment.

23. Will the amount of power I've already used be recorded at the time my meter is installed?

Yes. The exact reading on the existing meter at the time of installation will be captured and documented. You will be billed only for electric usage at your home or business.

24. How often will meter data be collected?

Meter data is collected each day and will provide usage intervals every fifteen minutes.

25. Where are the new meters manufactured?


Leesburg will use GE Energy smart meters assembled in the United States.

26. What will you do with the old meters?

Leesburg will recycle the reusable materials and metals from removed meters.


27. If my meter will be read remotely, will Leesburg still need access to my property?

Yes. Meter readers still need safe access to the meter until the system is fully activated, and if you are also a gas and/or water utility customer, meter readers will continue to need access to those meters.



Smart Meter Deployment

Frequently Asked Questions



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